

IN THE CLAIMS:

Please amend the claims as set forth below:

1-32 (Cancelled)

33. (Currently Amended) A computer system comprising:

a plurality of modules; and

a shift register having a plurality of slots connected in series, each one of the plurality of slots coupled to one of the plurality of modules, and an output of a last slot of the plurality of slots is coupled to an input of an initial slot of the plurality of slots to form a ring, each of the plurality of slots corresponding to a time slot on the ring, and each of the time slots assigned to one of the plurality of modules;

wherein at least two of the plurality of modules are configured to independently generate frames for transmission on the ring formed by the shift register, each frame comprising a communication between two or more of the plurality of modules.

34. (Currently Amended) ~~The computer system as recited in claim 33~~ A computer system comprising:

a plurality of modules; and

a shift register having a plurality of slots connected in series, each one of the plurality of slots coupled to one of the plurality of modules, wherein at least one of the plurality of modules comprises a bridge module coupled to communicate with other bridge modules separate from the plurality of modules.

35. (Previously Presented) The computer system as recited in claim 34 wherein the bridge modules communicate via a ring.
36. (Previously Presented) The computer system as recited in claim 35 wherein the ring comprises a second shift register have a second plurality of slots connected in series, each of the second plurality of slots coupled to one of the bridge modules.
37. (Previously Presented) The computer system as recited in claim 33 wherein at least one of the plurality of modules comprises a memory module.
38. (Previously Presented) The computer system as recited in claim 33 wherein at least one of the plurality of modules comprises a central processing unit (CPU) module.
39. (Previously Presented) The computer system as recited in claim 33 wherein at least one of the plurality of modules comprises an input/output (I/O) module.
40. (Previously Presented) The computer system as recited in claim 33 wherein each of the plurality of slots is configured to store a frame, and to transmit the frame to another one of the plurality of slots.
41. (Previously Presented) The computer system as recited in claim 33 wherein each one of the plurality of slots is coupled to an input from one of the plurality of modules.
42. (Previously Presented) The computer system as recited in claim 41 wherein the input comprises optical interconnect.
43. (Previously Presented) The computer system as recited in claim 33 wherein each one of the plurality of slots is coupled to an output to one of the plurality of modules.

44. (Previously Presented) The computer system as recited in claim 43 wherein the output comprises optical interconnect.

45. (Currently Amended) A method comprising:

shifting a plurality of frames in a plurality of slots of a shift register, the plurality of frames comprising communication among a plurality of modules, each of the plurality of slots coupled to one of the plurality of modules, and an output of a last slot of the plurality of slots is coupled to an input of an initial slot of the plurality of slots to form a ring, each of the plurality of slots corresponding to a time slot on the ring, and each of the time slots assigned to one of the plurality of modules, and wherein at least two of the plurality of modules are configured to independently generate frames for transmission on the ring formed by the shift register; and

each of the plurality of slots transmitting a first frame of the plurality of frames stored therein to the one of the plurality of modules to which that slot is coupled.

46. (Previously Presented) The method as recited in claim 45 wherein the transmitting comprises optically transmitting.

47. (New) The computer system as recited in claim 34 wherein at least one of the plurality of modules comprises a memory module.

48. (New) The computer system as recited in claim 34 wherein at least one of the plurality of modules comprises a central processing unit (CPU) module.

49. (New) The computer system as recited in claim 34 wherein at least one of the plurality of modules comprises an input/output (I/O) module.

50. (New) The computer system as recited in claim 34 wherein the plurality of slots are coupled to the plurality of modules using optical interconnect.

51. (New) The computer system as recited in claim 34 wherein each of the plurality of slots is configured to store a frame, and to transmit the frame to another one of the plurality of slots.